

ABSTRACT

5 A cylinder air filling amount is divided into a
first amount of air and a second amount of air, the first
amount of air and the second amount of air are calculated,
and the first amount of air and the second amount of air
are totaled to calculate a cylinder air filling amount.
The first amount of air is the excess of the cylinder air
filling amount with respect to the throttle valve air
10 passage amount occurring due to an intake stroke being
performed. The drop in intake pressure occurring due to
an intake stroke being performed is detected for each
cylinder and the total value of the intake pressure drop
in a 720° crank angle range is calculated. The first
15 amount of air is calculated based on an intake pressure
drop and the intake pressure drop total value. Due to
this, it is possible to simply and accurately calculate a
cylinder air filling amount.